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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,800	02/14/2008	Jerome Samson	20004/221US	5837
81905	7590	08/12/2009		
Hanley, Flight & Zimmerman, LLC 150 S. Wacker Dr. Suite 2100 Chicago, IL 60606			EXAMINER LU, KUEN S	
			ART UNIT 2156	PAPER NUMBER
			MAIL DATE 08/12/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,800	Applicant(s) SAMSON ET AL.	
	Examiner KUEN S. LU	Art Unit 2156	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7-9,11,12,16,17,19,22-24,26,27 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-9,11,12,16,17,19,22-24,26,27 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/21/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Action is responsive to Applicant's Amendment filed May 27, 2009. It is recognized that amendments were made to claims 1-2, 4, 7-9, 16-17, 19, 22-24, 26-27 and 31-34. To Arguments/Remarks filed in the Amendment, please see Examiner's responses shown after ***Rejections - 35 USC § 103***.

2. Please note claims 1-2, 4, 7-9, 11-12, 16-17, 19, 22-24, 26-27 and 31-34 are pending.

3. - 4. (intentionally left blank).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.1. Claims 1-2, 4, 7-9, 11-12, 16-17, 19, 22-24, 26-27 and 31-34 are rejected are rejected under U.S.C. 103(a) as being unpatentable over **Pham et al.**: "SYSTEM FOR

DATA MINING USING NEUROAGENTS”, U.S. Patent 5,970,482, filed February 12, 1996, and issued October 19, 1999, hereafter “Pham”; and in view of **Eftink**: “DATABASE CORRELATION METHOD”, U.S. Patent 6,370,547, filed April 27, 1999, and issued April 9, 2002.

As per claim 1, Pham teaches a method of fusing first and second datasets, comprising:

“determining an importance ranking of a plurality of variables associated with the first and second datasets” (See col. 18, lines 50-59 and Abstract where ranking in importance of composite parameters are calculated and records are merged from multiple data sources based on parameter for parameter).

Pham does not explicitly teach “generating a hierarchical matching grid including a plurality of levels based on the importance ranking of the plurality of variables”.

However, Eftink teaches “generating a hierarchical matching grid including a plurality of levels based on the importance ranking of the plurality of variables” (See col. 5, lines 38-56 where hierarchical levels of confidence to differ degrees of data similarity between databases are created in which a grid is formed by data and confidence levels).

It would have been obvious to one having ordinary skill in the art at the time of the applicant’s invention was made to combine the teaching of Eftink with Pham reference by using hierarchical structure to house rankings of matching attributes of database because the combined teaching would have enabled Pham’s system to generate

candidates for associating information sources.

The combined teaching of Eftink and Pham references further teaches the following: “identifying first and second sets of match candidates from the first and second datasets based on one of the plurality of levels of the hierarchical matching grid” (See Pham: col. 18, lines 50-59 and Abstract where ranking in importance of composite parameters are calculated and records are identified from multiple data sources based on parameter for parameter; and Eftink: col. 5, lines 38-56 where grid is formed by creating levels of confidence to differ degrees of data similarity between databases); and “fusing records in the first and second sets of match candidates based on probabilities associated with the records” (See Pham: col. 18, lines 50-59 and Abstract where ranking in importance of composite parameters are calculated and records are merged from multiple data sources based on parameter for parameter).

As per claim 16, the claim is directed to a system for fusing first and second datasets of claim 1 and therefore rejected along the same rationale.

As per claim 31, the claim is directed to a machine readable medium having instructions stored thereon for performing functions of claim 1 and therefore rejected along the same rationale.

As per claims 2, 17 and 32, the combined teaching of Eftink and Pham references further teaches “wherein determining the importance ranking of the plurality of

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variables includes ranking the plurality of variables based on a relative strength of a relationship between each of the variables and a respondent characteristic” (See Pham: col. 18, lines 50-59, col. 13, lines 1-5 and Abstract where ranking in importance of composite parameters are calculated and records are merged from multiple data sources based on parameter for parameter between inputting and merging data resources, and furthermore, relationship is established between different pieces of information and attributes, the features, is seen the respondent characteristic).

As per claims 4, 19 and 33, the combined teaching of Eftink and Pham references further teaches “wherein generating the hierarchical matching grid including the plurality of levels based on the importance ranking of the plurality of variables includes generating a series of binary values so that each of a plurality of bit positions associated with the binary values uniquely corresponds to one of the plurality of variables” (See Eftink: col. 6, lines 4-24 where attributes characteristics are compared by using index value which teaches binary and bit positions comparison; and Pham: col. 18, lines 50-59, col. 13, lines 1-5 and Abstract where ranking in importance of composite parameters are calculated and records are merged from multiple data sources based on parameter for parameter between inputting and merging data resources).

As per claims 7, 22 and 34, the combined teaching of Eftink and Pham references further teaches “wherein the generating the hierarchical matching grid including the plurality of levels based on the importance ranking of the plurality of variables includes

generating the hierarchical matching grid to allow skewed matching on one or more of the variables” (See Eftink: col. 5, lines 38-56 where hierarchical levels of confidence to differ degrees of data similarity between databases are created in which a grid is formed by data and confidence levels and further at col. 4, lines 10-19 where curvilinear approximation is closely defined to approximate an irregular shape associated with an identifier teaches skewed matching of attributes; and Pham: col. 18, lines 50-59, col. 13, lines 1-5 and Abstract where ranking in importance of composite parameters are calculated and records are merged from multiple data sources based on parameter for parameter between inputting and merging data resources).

As per claims 8 and 23, the combined teaching of Eftink and Pham references further teaches “wherein generating the hierarchical matching grid including the plurality of levels based on the importance ranking of the plurality of variables includes establishing a minimum matching level” (See Eftink: col. 5, lines 38-56 where hierarchical levels of confidence to differ degrees of data similarity between databases are created in which a grid is formed by data and confidence levels and data tolerances are utilized to established difference levels of confidence, including a first and higher which teaches a minimum matching level).

As per claims 9 and 24, the combined teaching of Eftink and Pham references further teaches “wherein identifying the first and second sets of match candidates from the first and second datasets based on the one of the plurality of levels of the

hierarchical matching grid includes using match criteria from the one of the plurality of levels of the hierarchical matching grid to identify records in the second dataset that match records in the first dataset on ones of the plurality of variables defined by the match criteria” (See Eftink: col. 9, lines 1-17 and col. 5, lines 38-56 where cross reference table for data pulled from different databases is created by using similarities of data between different databases and hierarchical levels of confidence to differ degrees of data similarity between databases are created in which a grid is formed by data and confidence level).

As per claims 11 and 26, the combined teaching of Eftink and Pham references further teaches “wherein fusing the records in the first and second sets of match candidates based on the probabilities associated with the records includes establishing the probabilities based on weights associated with records from at least one of the first and second sets of match candidates” (See Pham: col. 40, lines 41-46, col. 18, lines 50-59, col. 13, lines 1-5 and Abstract where ranking in importance of composite parameters are calculated based on weight/probability of the input parameter and records are merged from multiple data sources based on parameter for parameter between inputting and merging data resources, and Eftink: col. 9, lines 1-17 and col. 5, lines 38-56 where cross reference table for data pulled from different databases is created by using similarities of data between different databases and hierarchical levels of confidence to differ degrees of data similarity between databases are created in which a grid is formed by data and confidence level).

As per claims 12 and 27, the combined teaching of Eftink and Pham references further teaches the following:

“comparing a first sum of weights associated with the first set of match candidates with a second sum of weights associated with the second set of match candidates” (See Pham: col. 40, lines 41-46, col. 18, lines 50-59, col. 13, lines 1-5 and Abstract where ranking in importance of composite parameters are calculated based on weight and probability of the input parameter and records are merged from multiple data sources based on parameter for parameter between inputting and merging data resources);

“identifying one of the first and second sets of match candidates as overweight based on the comparison of the first and second sums of weights” (See Pham: col. 40, lines 41-46, col. 18, lines 50-59, col. 13, lines 1-5 and Abstract where ranking in importance of composite parameters are calculated based on weight/probability of the input parameter and records are merged from multiple data sources based on parameter for parameter between inputting and merging data resources); and

“trimming records of one of the first and second sets of match candidates identified as overweight prior to fusing the records in the first and second sets of match candidates” (See Eftink: col. 3, lines 45-59 where duplicate data are eliminated).

References

6.1. The prior art made of record

B. U.S. Patent Number 6,370,547

D. U.S. Patent Number 5,970,482

6.2. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

A. U.S. Patent Application 2003/0182296

C. U.S. Patent Number 6,556,987

E. U.S. Patent Number 6,287,123

F. U.S. Patent Application 2002/0026390

G. U.S. Patent Application 2002/0188689

Response to Arguments

5. Applicant's arguments with respect to claim 1 (also applicable to claims 16 and 31) have been fully and respectfully considered but are moot in view of the new ground(s) of rejection. Concerning Applicant's arguments on importance ranking of variables, Examiner has respectfully substituted Sato with Pham for providing such teaching. With respect to generating a hierarchical matching grid including a plurality of levels based on the **importance** ranking of the plurality of variables, Examiner respectfully cited Eftink: col. 5, lines 38-56 in which hierarchical levels of confidence to differ degrees of data similarity between databases are created, wherein a grid is formed by and seen as data and confidence levels. Also please note the importance ranking of variables is disclosed by Pham as cited. Based on the language of each independent claims, Examiner did interpret claim text broadly, however, believed the interpretation is reasonable.

Conclusions

6. THIS ACTION IS MADE FINAL.

The Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is 571-272-3574 for faster service.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to KUEN S. LU whose telephone number is (571)-272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, Pierre Vital can be reached on (571)-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Published applications may be obtained from either Private PAIR or Public PAIR.
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system, please call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KUEN S. LU /Kuen S Lu/

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Primary Patent Examiner

August 11, 2009